



K22P 0211

Reg. No. : .....

Name : .....



II Semester M.Com. Degree (C.B.S.S. – Reg./Supple./Imp.)  
Examination, April 2022  
(2018 Admission Onwards)

COM2C07 : RESEARCH METHODOLOGY AND COMPUTER APPLICATION

Time : 3 Hours

Max. Marks : 60

SECTION – A

Answer **any four** questions in this Section. **Each** question carries **1** mark for Part (a), **3** marks for Part (b) and **5** marks for Part (c).

1. a) What is Exploratory Research ?  
b) What are the objectives of research ?  
c) Explain the characteristics of hypothesis.
2. a) What is a research problem ?  
b) Distinguish between applied and fundamental research.  
c) Explain the qualities of a good research report.
3. a) What are Type I and Type II errors ?  
b) Explain the characteristics of a good sample design.  
c) Describe the different methods of sampling.
4. a) What is a research hypothesis ?  
b) Distinguish between Questionnaire and Interview Schedule.  
c) Explain the three principles of experimental designs.



5. a) What is a technical report ?  
 b) How computers are useful for research ?  
 c) Explain the applications of Chi-square test.
6. a) What is the basic principle of ANOVA ?  
 b) What are the uses of SPSS in social science research ?  
 c) In a diet survey the following results were obtained.

	District A	District B
Families taking tea	124	16
Families not taking tea	56	10

Is there any significant difference between the districts in the matter of tea taking ? (4×9=36)

### SECTION – B

Answer the **two** questions in this Section. **Each** question carries **12** marks.

7. a) Explain the different methods of collecting primary data.

OR

- b) The following table presents the number of defective pieces produced by three workmen operating in turn on three different machines.

	Machine 1	Machine 2	Machine 3
Workman 1	27	34	23
Workman 2	29	32	25
Workman 3	22	30	22

Conduct a two-way ANOVA to test 5 percent level of significance, whether :

- i) The differences among the means obtained for the three workmen can be attributed to chance.
- ii) The differences among the means obtained for the three machines can be attributed to chance.



8. a) "Research process consists of series of actions or steps necessary to effectively carry out research and the desired sequencing of these steps". Explain.

OR

- b) An insurance company provides auto insurance and is analysing the data obtained from fatal crashes. A sample of the motor vehicle deaths is randomly selected for a two-year period. The number of fatalities is listed below for the different days of the week. At the .05 significance level, test the claim that accidents occur on different days with equal frequency.

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Number of Fatalities	31	20	20	22	22	29	36

(2×12=24)